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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/581,241

DATE: 11/13/2001 TIME: 13:41:33

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4 MURAKAMI, SEIJI 6 <120> TITLE OF INVENTION: LUCIFERASE AND A METHOD FOR DETECTING INTR	ACELLULAR
USING THE SAME 8 <130> FILE REFERENCE: 193582US-3524-7126-0 PCT	
8 <130> FILE REFERENCE: 19330 NUMBER: 09/581241 10 <140> CURRENT APPLICATION NUMBER: 09/581241	
10 <140 CORRENT ATTECHTION 12000-06-26 11 <141> CURRENT FILING DATE: 2000-06-26	
10 150 PRIOR ARRITCATION NUMBER: JP9//301022	
13 <150> PRIOR FILING DATE: 1997-12-26	
16 <160> NUMBER OF SEO ID NOS: 6	1 (L I)
18 <170> SOFTWARE: PatentIn version 3.1	
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21 <211> LENGTH: 23	
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37 <220 FEATORE. 38 <223 OTHER INFORMATION: SYNTHETIC DNA	
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61 Phe Tyr Pro Ile Giu Giy Sei Aid Giy Mid 300	
	144
62 20 20 20 64 atg gat cga tat gca aaa ctt gga gca att gct ttt act aac gca ctt	
65 Met Asp Arg Tyr Ala Lys Leu Gly Ala Tie Ala The	
66 35 40 ggg gaa tag tta gaa aga tca tgc tgt	192
68 acc ggt gtc gat tat acg tac gcc gaa tac ced gab and 68 acc ggt gtc gat tat acg tac gcc gaa tac ced gab and 68 acc ggt gtc gat tat acg tac gcc gaa tac ced gab and 68 acc ggt gtc gat tat acg tac gcc gaa tac ced gab acc get gab acc get gab acc get gab acc ggt gtc gat tat acg tac gcc gaa tac ced gab acc get gab acc got gab acc go	
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PATENT APPLICATION: US/09/581,241

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72 cta gga gag gct tta aag aat tat ggt ctg gee gee gee gee gee gee gee gee gee g	
73 Leu Gly Glu Ala Leu Lys Ash 171 021 21 80	
/4 65	288
76 gcg tta tgc agt gaa aac tgt gaa gaa tee ees all Pro Val Leu Ala 77 Ala Leu Cys Ser Glu Asn Cys Glu Glu Phe Phe Ile Pro Val Leu Ala 90 95	
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70 get got goa act aat gag att tac act	336
80 ggt tta ttt ata ggt gtc ggt gtg gct ccd dec day Ile Tyr Thr 81 Gly Leu Phe Ile Gly Val Gly Val Ala Pro Thr Asn Glu Ile Tyr Thr	
81 Gly Leu Phe 11e Gly var Gly var 110	
82 100 and the ggg atc tct aag cca aca att gta	384
84 cta cgt gaa ttg gtt cac agt tta ggt ate too lary 85 Leu Arg Glu Leu Val His Ser Leu Gly Ile Ser Lys Pro Thr Ile Val	
85 Leu Arg Glu Leu var His Ser Bea 617 125	
86 III and any get at a act gta caa aaa acg	432
88 ttt agt tct aaa aaa gga tta gat aaa gtc aca ggc aca	
89 Phe Ser Ser Lys Lys Gly Lett ASP 275 140	
90 130 at tat	480
92 gta act gct att aaa acc att gtt ata teg gab ag 93 Val Thr Ala Ile Lys Thr Ile Val Ile Leu Asp Ser Lys Val Asp Tyr 155 160	
94 145	528
96 aga ggt tat caa tee atg gae dae ett det dat dat 96 aga ggt tat caa tee atg gae dae ett det dat dat 97 Arg Gly Tyr Gln Ser Met Asp Asn Phe Ile Lys Lys Asn Thr Pro Gln 97 Arg Gly Tyr Gln Ser Met Asp Asn Phe Ile Lys Lys Asn Thr Pro Gln 170 175	
97 Arg Gly Tyr Gln Ser Met Asp Ash The 170 175	_
98 103 agt gta gaa gtt aac cgc aaa gaa	576
100 ggt ttc aaa gga tca agt ttt add act gtd gdd gdd gdb Asn Arg Lys Glu 101 Gly Phe Lys Gly Ser Ser Phe Lys Thr Val Glu Val Asn Arg Lys Glu 185	
102 100 and tot tog ggt tog acc ggt ttg cca aaa	624
104 caa gtt gct ctt ata atg aac tet teg ggt tod door 35 105 Gln Val Ala Leu Ile Met Asn Ser Ser Gly Ser Thr Gly Leu Pro Lys 205	
105 Gln Val Ala Leu IIe Met Ash Sel Sel Gly 502	
106 193 and the great aga tit tet cae get	672
108 ggt gtg caa ctt act cat gaa dat ttg gte det age 109 Gly Val Gln Leu Thr His Glu Asn Leu Val Thr Arg Phe Ser His Ala 220	
109 Gly Val Gln Leu Thr HIS Glu Ash Leu Val 220	
110 210 and get too good acq got att tta	720
112 aga gat cca att tat gga aac caa gtt ted cod ggs and le Leu 113 Arg Asp Pro Ile Tyr Gly Asn Gln Val Ser Pro Gly Thr Ala Ile Leu 240	
113 Arg Asp Pro Ile Tyr Gly Ash Gin var 552 240	
114 225	768
116 act gta gta cca ttc cat cat ggt ttt ggt deg edd art 117 Thr Val Val Pro Phe His His Gly Phe Gly Met Phe Thr Thr Leu Gly 250 255	
117 Thr Val Val Pro Pne HIS HIS GIV The 327 255	
118 243 art att atc atg tta acg aaa ttt gac gaa	816
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121 Tyr Leu Thr Cys Gly Phe Arg Tie var nos 270	
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124 gag act ttt tta aaa aca ctg caa gut tub dad 131 125 Glu Thr Phe Leu Lys Thr Leu Gln Asp Tyr Lys Cys Ser Ser Val Ile	
126 273 and the man att oft aat aga agt gaa tta oto gat	912
128 ctt gta ccg act ttg ttt gca att ctt dde dy 199 g 129 Leu Val Pro Thr Leu Phe Ala Ile Leu Asn Arg Ser Glu Leu Leu Asp	
129 Leu Val Pro Thr Leu Pne Ala Tie Leu Ash May 300	
130 290 293 att gca tot ggc gga gca cot	960
132 aaa tat gat tta tca aat tta git gaa att god soo 333 Si	
133 Lys Tyr Asp Leu Ser Ash Leu val Glu 133	
134 305 310 313 136 tta tct aaa gaa att ggt gaa gct gtt gct aga cgt ttt aat tta ccg	1008
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142 340 349 144 atc aca ccg gaa ggc gat gat aaa cca ggt gct tct ggc aaa gtt gtg 144 atc aca ccg gaa ggc gat gat aaa cca ggt gct tct ggc aaa gtt gtg	
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146 355 360 360 365 and act ttg	1152
146 355 360 148 cca tta ttt aaa gca aaa gtt atc gat ctt gat act aaa aaa act ttg 148 cca tta ttt aaa gca aaa gtt atc gat ctt gat act aaa aaa act ttg	
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102 at a gac day of a CCT dad yyu coo	1584
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too and atta cty and atta cty and atta cty	1632
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237 240 Val						Ile									
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245 248 Gly	y Phe	Lys	Gly	165 Ser	Ser	Phe	Lys	Thr 185	Val	Glu	Val	Asn	Arg 190	Lys	Glu
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289 292 Il	e Th	r Pro	o Glu	ı Gl	y Ası	p As	р Ly 36	s Pr	o Gl	y Al	a Se	r Gl 36	у Lу 5	s Va 	ı vaı
293 296 Pi	co Le	u Ph	e Lys	s Ala	a Ly	s Va 37	1 I1 5	e As	p Le	eu As	sp Th 38	r Ly 0	s Ly	s Th	r Leu
300 G	Ly Pr	o As	n Ar	g Ar	g Gl	y Gl	u Va	al Cy	s Va	al Ly	s Gl	y Pr	о Ме	:t L∈	u Met

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PATENT APPLICATION: US/09/581,241

DATE: 11/13/2001
TIME: 13:41:34

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VERIFICATION SUMMARY

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